

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph [0001] with the following rewritten paragraph:

[0001] This application is related to concurrently filed U.S. Patent Application No. 09/939,122, filed August 23, 2002, entitled "FRAMEWORKS FOR GENERATION OF JAVA MACRO INSTRUCTIONS IN JAVA COMPUTING ENVIRONMENTS," (~~Atty. Docket No. SUN1P828/P6116~~) which is hereby incorporated herein by reference for all purposes.

Please replace the paragraph [0002] with the following rewritten paragraph:

[0002] This application is related to concurrently filed U.S. Patent Application No. 09/939,310, filed August 24, 2001, entitled "FRAMEWORKS FOR GENERATION OF JAVA MACRO INSTRUCTIONS FOR INSTANTIATING JAVA OBJECTS," (~~Atty. Docket No. SUN1P839/P6719~~) which is hereby incorporated herein by reference for all purposes.

Please replace the paragraph [0003] with the following rewritten paragraph:

[0003] This application is related to concurrently filed U.S. Patent Application No. 09/938,915, filed August 24, 2001, entitled "FRAMEWORKS FOR GENERATION OF JAVA MACRO INSTRUCTIONS FOR PERFORMING PROGRAMMING LOOPS," (~~Atty. Docket No. SUN1P840/P6721~~) which is hereby incorporated herein by reference for all purposes.

Please replace the paragraph [0004] with the following rewritten paragraph:

[0004] This application is related to U.S. Patent Application No. 09/819,120, filed March 27, 2001 (~~Att. Dkt. No. SUN1P811/P5512~~), entitled "REDUCED INSTRUCTION SET FOR JAVA VIRTUAL MACHINES," and hereby incorporated herein by reference for all purposes.

Please replace the paragraph [0005] with the following rewritten paragraph:

[0005] This application is related to U.S. Patent Application No. 09/703,449, filed October 31, 2000 (~~Att.Dkt.No. SUN1P814/P5417~~), entitled "IMPROVED FRAMEWORKS FOR LOADING AND EXECUTION OF OBJECT-BASED PROGRAMS," which is hereby incorporated herein by reference for all purposes.

Please replace the paragraph [0006] with the following rewritten paragraph:

[0006] This application is related to U.S. Patent Application No. 09/820,097, filed March 27, 2001 (~~Att.Dkt.No. SUN1P827/P6095~~), entitled "ENHANCED VIRTUAL MACHINE INSTRUCTIONS," which is also hereby incorporated herein by reference for all purposes.

Please replace the paragraph [0029] with the following rewritten paragraph:

[0029] It should be noted that the Java macro instruction generator 202 can also be used in conjunction with a Java Bytecode translator in accordance with one preferred embodiment of the invention. Referring now to Fig. 2B, a Java Bytecode translator 230 operates to translate conventional Java instructions 1-M into inventive Java instructions 234 (1-N), wherein N is an integer less than the integer M. More details about the Java Bytecode translator 230 and inventive Java instructions 1-N are described in U.S. Patent Application No. 09/819,120 (~~Att.Dkt.No. SUN1P811/P5512~~), entitled "REDUCED INSTRUCTION SET FOR JAVA VIRTUAL MACHINES," and U.S. Patent Application No. 09/820,097 (~~Att.Dkt.No. SUN1P827/P6095~~), entitled "ENHANCED VIRTUAL MACHINE INSTRUCTIONS." As will be appreciated, the use of the inventive Java instructions in conjunction with the Java macro instruction generator can further enhance the performance of virtual machines.

Please replace the paragraph [0030] with the following rewritten paragraph:

[0030] It should also be noted that the Java macro instruction can be internally represented in the virtual machine as a pair of Java streams in accordance with one embodiment of the invention. The pair of Java streams can be a code stream and a data stream. The code stream is suitable for containing the code portion of Java macro

instructions, and the data stream is suitable for containing a data portion of said Java macro instruction. More details about representing instructions as a pair of streams can be found in the U.S. Patent Application No. 09/703,449 (~~Att.Dkt.No. SUN1P814/P5417~~), entitled "~~IMPROVED~~ FRAMEWORKS FOR LOADING AND EXECUTION OF OBJECT-BASED PROGRAMS."

Please replace the paragraph [0039] with the following rewritten paragraph:

[0039] Again, it should be noted that the Java macro instruction 602 can also be used in conjunction with a Java Bytecode translator in accordance with one preferred embodiment of the invention. More details about the Java Bytecode translator and inventive Java Bytecode instructions are described in U.S. Patent Application No. 09/819,120 (~~Att.Dkt.No. SUN1P811/P5512~~), entitled "REDUCED INSTRUCTION SET FOR JAVA VIRTUAL MACHINES," and U.S. Patent Application No. 09/820,097 (~~Att.Dkt.No. SUN1P827/P6095~~), entitled "ENHANCED VIRTUAL MACHINE INSTRUCTIONS."